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EXAMINER	
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ART UNIT	PAPER NUMBER
2173	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/828,684	MORITA ET AL.	
	Examiner	Art Unit	
	Nicholas S. Ulrich	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1, 3, 10, 11, 14, 16, 18, 20, 23-27, 29, 31- 34, 36 – 42, and 47-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3, 10, 11, 14, 16, 18, 20, 23-27, 29, 31- 34, 36 – 42, and 47-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 3, 10, 11, 14, 16, 18, 20, 23-27, 29, 31- 34, 36 – 42, and 47-54 are pending.

2. Claims 47 - 54 have been added.

3. Claims 1, 10, 16, 18, 20, and 26 have been amended.

4. Claims 2, 4-9, 12-13, 15, 17, 19, 21-22, 28, 30, 35, and 43-46 have been cancelled.

5. Claims 1, 3, 10, 11, 14, 16, 18, 20, 23-27, 29, 31- 34, 36 – 42, and 47-54 are rejected.

Claim Objections

6. Claim 16 objected to because of the following informalities: Applicant amended claim 16 and added, "and **states** an image file...". Examiner believes that "states" should read "saves". Appropriate correction is required.

7. Claims 20, 41, and 48 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 20 is dependent on a cancelled claim. Claim 41 is dependent on a cancelled claim. Claim 48 is dependent to itself.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3, 6, 7, 10, 11, 16, 18, 20, 21, 23 – 27, 29, 31-41, and 43-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roehrig et al. (US 2002/0097902 A1) in view of Ema et al. (US 5779634) and Rogers (US 6970587 B1).

In regard to **claim 1,** Roehrig discloses

displaying an image of the anatomical feature *(Fig 10 element 1055 and Paragraph 0057 line 5: The annotation map discussed by Roehrig is a anatomical representation of a breast);*

displaying a first indication associated with each marker indicative of the probability that the region of the pathological interest is cancerous *(Paragraph 0065: colors are used to express the probability of cancer for each marker)*;

displaying a second indication associated with each marker indicative of a classification of the region of pathological interest *(Paragraph 0009 lines 24-30: discussed is two different kinds of markers used to specify information regarding the features of the suspected abnormalities. Discussed are classifying abnormalities as either cluster micro calcifications or mass).*

While Roehrig teaches displaying regions of pathological interest of an anatomical feature, Roehrig fails to show simultaneously displaying with the image a uniquely identified marker corresponding to each computer-detected region of pathological interest.

Ema teaches displaying computer-detected abnormalities similar to that of Roehrig. In addition, Ema further teaches unique identifiers corresponding to each region of pathological interest *(Column 49 lines 8-22)*.

It would have been obvious to one of ordinary skill in the art, having the teachings of Roehrig and Ema before him at the time the invention was made, to modify the displaying of regions of pathological interest of an anatomical feature taught by Roehrig to include unique identifiers of Ema, in order to obtain displaying regions of pathological interest of an anatomical feature with unique identifiers for each region of pathological interest. It would have been advantageous for one to utilize such a combination in order to reference and label regions of pathological interest, as taught by Ema *(Column 49 lines 12-13)*.

Further, Roehrig and Ema fail to explicitly disclose "receiving a user-input command related to at least one uniquely identified markers" and "saving the uniquely identified markers in the stored image".

However, Rogers discloses a method of receiving a first user-input command that selects one of the identified markers for classification *(Column 22 lines 16 -19: Rogers specify the selection for removal of the marker but it should be understood that this is only one embodiment and the same selection could be used for selecting a*

marker to add classification data); and saving the uniquely identified markers in the stored image *(Column 15 line 45 – Column 16 line 6).*

Roehrig, Ema, and Rogers are analogous art because they are both from the same field of endeavor of computer aided abnormality detection in medical imaging. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roger and Ema to Roehrig invention because one of ordinary skill in the art would be motivated to allow a user to input data associated with each determined abnormality for better classification. One skilled in the art would also be motivated to store the identified markers in the stored image for later viewing and retrieval by a user.

Roehrig, Ema, and Roger fail to disclose modifying the visual appearance of at least one of the uniquely identified markers according to the received user input command. However, Roehrig teaches indication associated with each marker indicative of a classification of the region of pathological interest *(Paragraph 0009 lines 24-30)* and Roger teaches a user selecting classification alternatives *(discussed above)*. Therefore it would be obvious when combining Roehrig, Ema, and Roger to modify the indications associated with the classification of each marker to reflect changes made by user for alternative classifications. The motivation would be to visually reflect the classification of a given marker when altered by a user. It would maintain the aspect of Roehrig invention to display classification data to the user by showing different shapes.

In regard to **claim 3**, Roehrig teaches wherein the probability of cancer for each region of pathological interest is determined by a computer-implemented detection algorithm *(Paragraph 0055: output of the classifier sub-stage is usually the probability information of the detected abnormalities).*

In regard to **claim 10**, Roehrig discloses a method of interactively displaying a number of unique locations of pathological interest of an anatomical feature, the method comprising:

displaying an image of the anatomical feature the image being of a diagnostic quality *(Fig 10 element 1055 and Paragraph 0057 line 5: The annotation map discussed by Roehrig is a anatomical representation of a breast);*

While Roehrig teaches displaying regions of pathological interest of an anatomical feature, Roehrig fails to show simultaneously displaying with the image a uniquely identified marker corresponding to each computer-detected region of pathological interest as determined by a computer algorithm.

Ema teaches displaying computer-detected abnormalities similar to that of Roehrig. In addition, Ema further teaches unique identifiers corresponding to each region of pathological interest *(Column 49 lines 8-22).*

It would have been obvious to one of ordinary skill in the art, having the teachings of Roehrig and Ema before him at the time the invention was made, to modify the displaying of regions of pathological interest of an anatomical feature taught by Roehrig to include the unique identifiers of Ema invention, in order to obtain displaying

regions of pathological interest of an anatomical feature with unique identifiers for each region of pathological interest. It would have been advantageous for one to utilize such a combination in order to reference and label regions of pathological interest, as taught by Ema *(Column 49 lines 12-13).*

Further, Roehrig and Ema fail to disclose "receiving a first user-input command that selects one of the uniquely identified markers for classification", "displaying a menu of user-selectable classification alternatives in response to the first user-input command, the classification alternative representing physiological assessment of the region of pathological interest", "receiving a second user-input command that selects one of the user- selectable classification alternatives", "modifying the visual appearance of the displayed marker in response to the classification alternative selected by the second user-input command", and "saving the displayed uniquely identified marker with the image of the anatomical feature.

However, Rogers discloses a method of receiving a first user-input command that selects one of the identified markers for classification *(Column 22 lines 16 -19: Rogers specify the selection for removal of the marker but it should be understood that this is only one embodiment and the same selection could be used for selecting a marker to add classification data);*

displaying a menu of user-selectable classification alternatives in response to the first user-input command *(Column 21 line 2: pull down menu);*

receiving a second user-input command that selects one of the user- selectable classification alternatives *(Column 20 line 65 to Column 21 line 8: It should be*

understood that the operation of pull-down menu's are well known in the art and it is inherently shown in Rogers disclosure that a second user input would be required to select the particular classification from within the drop down menu);

and saving the displayed uniquely identified marker with the image of the anatomical feature *(Column 15 line 45 – Column 16 line 6).*

Roehrig, Ema, and Rogers are analogous art because they are both from the same field of endeavor of computer aided abnormality detection in medical imaging. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roger and Ema to Roehrig invention because one of ordinary skill in the art would be motivated to allow a user to input data associated with each determined abnormality for better classification. One skilled in the art would also be motivated to store the identified markers in the stored image for later viewing and retrieval by a user.

Roehrig, Ema, and Roger fail to disclose modifying the visual appearance of the displayed marker in response to the classification alternative selected by the second user-input command. However, Roehrig teaches indication associated with each marker indicative of a classification of the region of pathological interest *(Paragraph 0009 lines 24-30)* and Roger teaches a user selecting classification alternatives *(discussed above).* Therefore it would be obvious when combining Roehrig, Ema, and Roger to modify the indications associated with the classification of each marker to reflect changes made by user for alternative classifications. The motivation would be to visually reflect the classification of a given marker when altered by a user. It would

maintain the aspect of Roehrig invention to display classification data to the user by showing different shapes.

In regard to **claim 11**, the unique identifier as taught by Ema in the rejection of claim 10, further includes an alphanumeric label adjacent to the marker *(Column 49 lines 8-22)*. The motivation to combine is the same as discussed for rejection of claim 10.

In regard to **claims 16**, System claim 16 corresponds generally to method claim 10, and recites similar features in system form, and therefore is rejected under the same rationale.

In regard to **claim 18**, Roehrig discloses the system wherein each marker is configured to be electronically stored the same image layer as the image of the anatomical feature in the storage media (*Paragraph 0047 lines 10-12*).

In regard to **claim 20**, Roehrig and Ema fail to disclose viewable classification data entered includes a user-determined classification of the computer-detected region as a false-positive detection. However, Rogers discloses viewable classification data includes a user selection of the classification data from an electronically displayed menu of alternative classifications wherein one of the menu options is for inputting

classification of the computer-detected region as a false-positive detection *(Column 20 line 65 to Column 21 line 8)*.

Roehrig, Ema, and Rogers are analogous art because they are all from the same field of endeavor of computer aided abnormality detection in medical imaging. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roger to Roehrig invention because one of ordinary skill in the art would be motivated to allow a user to input data associated with each determined abnormality for better classification

In regard to **claim 23**, Roehrig discloses the system wherein the Computer-implemented detection algorithm determines a probability of cancer for each region of pathological interest *(Paragraph 0055: output of the classifier sub-stage is usually the probability information of the detected abnormities)*.

In regard to **claim 24**, Roehrig discloses the system wherein each marker visually indicate the probability of cancer determined by the computer-implemented detection algorithm *(Paragraph 0065)*.

In regard to **claim 25**, Roehrig discloses the system wherein the color of each marker visually indicates the probability of cancer determined by the computer-implemented detection algorithm *(Paragraph 0065)*

In regard to **claims 26 and 29**, Roehrig discloses a marker for use with a graphical user interface for uniquely identifying a location of pathological interest, the marker comprising:

a visual indication of the probability of cancer for the location of pathological interest *Paragraph 0065: colors are used to express the probability of cancer for each marker);*

While Roehrig teaches displaying regions of pathological interest of an anatomical feature, Roehrig fails to show simultaneously displaying with the image a uniquely identified marker corresponding to each computer-detected region of pathological interest.

Ema teaches displaying computer-detected abnormalities similar to that of Roehrig. In addition, Ema further teaches unique identifiers corresponding to each region of pathological interest *(Column 49 lines 8-22).*

It would have been obvious to one of ordinary skill in the art, having the teachings of Roehrig and Ema before him at the time the invention was made, to modify the displaying of regions of pathological interest of an anatomical feature taught by Roehrig to include unique identifiers of Ema, in order to obtain displaying regions of pathological interest of an anatomical feature with unique identifiers for each region of pathological interest. It would have been advantageous for one to utilize such a combination in order to reference and label regions of pathological interest, as taught by Ema *(Column 49 lines 12-13).*

Further, while Roehrig teaches a visual indication of classification data *(Paragraph 0009 lines 24-30: discussed is two different kinds of markers used to specify information regarding the features of the suspected abnormalities. Discussed are classifying abnormalities as either cluster micro calcifications or mass)*, Roehrig and Ema fail to teach "based on user input" and "the marker is configured to be saved in association with an image of an anatomical feature".

However, Roger teaches displaying a menu of user-selectable classification alternatives in response to the first user-input command *(Column 21 line 2: pull down menu);*

receiving a second user-input command that selects one of the user- selectable classification alternatives *(Column 20 line 65 to Column 21 line 8: It should be understood that the operation of pull-down menu's are well known in the art and it is inherently shown in Rogers disclosure that a second user input would be required to select the particular classification from within the drop down menu);*

and the marker is configured to be saved in association with an image of an anatomical feature *(Column 15 line 45 – Column 16 line 6).*

Therefore it would be obvious when combining Roehrig, Ema, and Roger to modify the indications associated with the classification of each marker to reflect changes made by user for alternative classifications. The motivation would be to visually reflect the classification of a given marker when altered by a user. It would maintain the aspect of Roehrig invention to display classification data to the user by showing different shapes.

In regard to **claims 27 and 40**, the unique identifier as taught by Ema in the rejection of claim 26, further includes an alphanumeric label adjacent to the marker *(Column 49 lines 8-22)*. The motivation to combine is the same as discussed for rejection of claim 26.

In regard to **claims 31-34 and 38**, Roehrig and Ema fail to disclose wherein the viewable classification data includes false positive, cyst, and nodule.

However, Rogers discloses wherein the viewable classification data includes a user-determined classification region as false positive, a micro calcification, a cyst, or a nodule (*Column 20 line 65 to Column 21 line 8, Fig 41, and Column 21 line 4: Classification information can include type of lesion. A cyst, micro calcification, and a nodule can be considered types of lesions).*

Roehrig, Ema, and Rogers are analogous art because they are both from the same field of endeavor of computer aided abnormality detection in medical imaging. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roger to Roehrig invention because one of ordinary skill in the art would be motivated to allow a user to specify the type of lesion that the marker corresponds to.

In regard to **claims 36 and 41**, Roehrig and Ema both fail to disclose wherein the user enters the classification of the region of pathological interest and wherein the classification of the region of pathological interest is a physiological assessment of the region of pathological interest. Rogers teaches displaying computer-detected abnormalities similar to that of Roehrig and Ema. In addition, Rogers further teaches a user enters classification of the region of pathological interest *(Fig 35 element 1660)* and the classification of the region is a physiological assessment *(Column 20 line 65 to Column 21 line 8);*

Roehrig, Ema, and Rogers are analogous art because they are all from the same field of endeavor of computer aided abnormality detection in medical imaging. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Roger, Ema, and Roehrig because one of ordinary skill in the art would be motivated to allow a user to input data associated with each determined abnormality for better classification.

In regard to **claim 37**, Roehrig discloses wherein the second indication comprises the shape of each marker visually indicating the classification of the region of pathological interest *(Paragraph 0009 lines 24-30: discussed is two different kinds of markers used to specify information regarding the features of the suspected abnormalities. Star and triangle).*

In regard to **claim 39**, while Roehrig teaches a visual indication of classification data *(Paragraph 0009 lines 24-30: discussed is two different kinds of markers used to specify information regarding the features of the suspected abnormalities. Discussed are classifying abnormalities as either cluster micro calcifications or mass)*, Roehrig and Ema fail to teach based on user input.

However, Roger teaches displaying a menu of user-selectable classification alternatives in response to the first user-input command *(Column 21 line 2: pull down menu);*

receiving a second user-input command that selects one of the user- selectable classification alternatives *(Column 20 line 65 to Column 21 line 8: It should be understood that the operation of pull-down menu's are well known in the art and it is inherently shown in Rogers disclosure that a second user input would be required to select the particular classification from within the drop down menu);*

Therefore it would be obvious when combining Roehrig, Ema, and Roger to modify the indications associated with the classification of each marker to reflect changes made by user for alternative classifications. The motivation would be to visually reflect the classification of a given marker when altered by a user. It would maintain the aspect of Roehrig invention to display classification data to the user by showing different shapes.

In regard to **claim 48**, Roehrig discloses wherein the image is of a quality such that the image may be the basis of a diagnostic analysis by a clinician *(Paragraph 0030)*.

In regard to **claims 47, 49, and 51**, although Rogers discloses saving to a hard disk, they do not explicitly mention the use of a remote location for saving. It is notoriously well known in the state of the art, though, that remote storage is regularly implemented when saving files. The examiner takes OFFICIAL NOTICE of this teaching. It would have been obvious to one of ordinary skill in the art, having the teachings of Rogers before him, to modify the save to hard disk of Rogers to save to remote location. The motivation would be provide a backup of the file. Also, with rapid growth of the internet, and the ability for users to access data wirelessly from an endless number of locations, it would be advantageous to store the file in a remote location, like a server, in order to allow a physician or patient to retrieve the image from a wireless device by accessing the remote location where the file is stored.

In regard to **claims 50, 52, 53, and 54**, while Roehrig and Ema teach displaying regions of pathological interest on an anatomical feature, they fail to show "the processor is configured to open the stored image file of the anatomical image and the uniquely identified markers such that a clinician may use the processor to open the file and view the image and the markers on the display", "the marker is configured to be

saved as a portion of the associated image", and "saving the modified uniquely identified markers in the stored image" as recited in the claims.

Rogers teaches the processor is configured to open the stored image file of the anatomical image and the uniquely identified markers such that a clinician may use the processor to open the file and view the image and the markers on the display, the marker is configured to be saved as a portion of the image, and saving the modified uniquely identified markers in the stored image *(Column 15 line 46 – Column 16 line 7)*.

It would have been obvious to one of ordinary skill in the art, having the teachings of Roehrig, Ema, and Rogers before him at the time the invention was made, to provide the ability to save a anatomical feature with indicated regions of pathological interest and the ability to open and view the saved file. It is notoriously well known in the art, to provide means for saving and opening files on computer systems. All the above references deal with making annotations using computer systems. It would be obvious to provide a user with the ability to save and open the files with indicated regions.

9. Claims 14 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roehrig et al. (US 2002/0097902 A1) in view of Ema et al. (US 5779634), Rogers (US 6970587 B1), and Ozaki et al. (US 2006/0050943 A1).

In regard to **claims 14 and 42**, while Roehrig teaches using a visual indicator of the marker to show classification data *(Paragraph 0009 lines 20-30)*, Roehrig fails to disclose changing the color the visual appearance of marker based on user classification.

While Ema teaches displaying regions of pathological interest on an anatomical figure, Ema fails to disclose changing the color of the visual appearance of the marker based on user input.

While Rogers teaches a user modifying classification data, Rogers fails to disclose changing the color of the visual appearance of the marker based on user classification.

Ozaki teaches displaying regions of pathological interest on an anatomical figure similar to that of Roehrig, Rogers and Ema. In addition, Ozaki teaches representing the classification of region of pathological interest on a anatomical figure using color *(Paragraph 0090)*.

Therefore it would be obvious to one skilled in the art at the time of invention to combine Roehrig, Ema, Roger, and Ozaki to modify the indications associated with the classification of each marker to reflect changes made by user for alternative classifications. The motivation would be to visually reflect the classification of a given marker when altered by a user. It would maintain the aspect of Roehrig and Ozaki inventions to display classification data to the user by showing visual indications.

Response to Arguments

10. Applicant's arguments with respect to claims 1, 3, and 5 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's arguments filed 9/19/2007 have been fully considered but they are not persuasive.

With respect to claim 10, applicant argues that Roehrig, Ema, and Rogers fail to disclose saving the uniquely identified markers with the image. The examiner disagrees.

Rogers clearly teaches saving the uniquely identified markers with the image. Please see Rogers, Column 15 line 46 0 Column 16 line 5. Excerpts from the cited passage state "locations of clustered microcalcifications are passed to the display detections procedure as a list of row and column coordinates", "bounding boxes defined by ... coordinates are added to the original digitized image", and "the resulting image is then stored as a computer-readable file". Rogers teaches indicating the detected clusters on the original mammogram image and storing it as a single computer readable file.

With respect to claim 10, applicant argues that Rogers fails to teach visually modifying the classification and probability information displayed by the marker. The examiner agrees with this statement, but is relying upon the combination of Roehrig, Ema, and Rogers for this teaching. The examiner would like to discuss why it would be obvious to use these references to cover the limitation of changing the visual

appearance of a marker based on user classification. The sources are combinable because they are from the same field of endeavor of displaying regions of pathological interest on an anatomical figure. Roehrig discusses having different shapes of markers to define different classifications of the markers. Rogers discusses the ability to select a marker and change or add classification data to the marker. Since Roehrig displays a visual indication of the classification of the marker, it would be obvious to one skilled in the art when combining Roehrig and Rogers invention to also update the visual indication of the classification of the marker with respect to user input updating or setting the classification of the marker. This would maintain an important aspect of Roehrig invention where the marker visually indicates the classification of the specified marker.

12. With respect to claims 16 and 26, applicant argues that Roehrig, Ema, and Rogers fail to disclose saving the uniquely identified markers with the image. The examiner disagrees. Please see comments to claim 10 arguments above.

13. With respect to claims 14 and 42, in response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's

disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

The Ozaki references clearly teaches that it was known in the art to classify different sicknesses on an anatomical figure, using different colors for each sickness. Since Roehrig, Ema, and Rogers all deal with displaying indications of sickness on an anatomical feature, it is obvious that each identified sickness could be designated by different colors. It is a way to show plural diseases at once on an anatomical feature.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicholas S. Ulrich whose telephone number is 571-270-1397. The examiner can normally be reached on M-TH 9:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on 571-272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nicholas Ulrich
10/15/2007
2173

JOHN CABECA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER